

MAR 27 2006

AVAGO TECHNOLOGIES, LTD.
P.O. Box 1920
Denver, Colorado 80201-1920

ATTORNEY DOCKET NO. 10031180-1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Laura Wills Mirkarimi, et al

Serial No.: 10/692,772

Examiner: Vinh Lan

Filing Date: October 24, 2003

Group Art Unit: 1765

Title: Method for Etching Smooth Sidewalls in III-V Based Compounds for Electro-Optical Devices

COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria VA 22313-1450INFORMATION DISCLOSURE STATEMENT

Sir:

This Information Disclosure Statement is submitted:

- (a) ☐ Under 37 CFR 1.97(b).
(Within three months of filing national application; or date of entry of national application; or before mailing date of first Office action on the merits; whichever occurs last).
- (b) ☒ Under 37 CFR 1.97(c) together with *either* a:
☐ Statement under CFR 1.97(e), or
☒ \$180.00 fee under 37 CFR 1.17(p).
(After the CFR 1.97(b) time period, but before a final action or notice of allowance, whichever occurs first).
- (c) ☐ Under 37 CFR 1.97(d) together with: a
Statement under 37 CFR 1.97(e), *and*
\$180.00 fee as set forth in 37 CFR 1.17(p).
(After a final action or notice of allowance, whichever occurs first, but before payment of the issue fee).

☐ STATEMENT UNDER 37 CFR 1.97(e)

The undersigned certifies that:

- ☐ Each item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the statement, or
- ☐ No item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, was known to any individual designated in 37 CFR § 1.56(c) more than three months prior to the filing of the Information Disclosure Statement.

☐ PRIOR APPLICATIONS

References identified with an asterisk (*) in the enclosed PTO Form 1449, were disclosed in prior Patent Application No. _____, filed _____, now U.S. Patent No. _____, and, as such, copies thereof are not included pursuant to the provisions of 37 CFR 1.98(d).

☐ FOREIGN LANGUAGE DOCUMENTS

A concise explanation of the relevance of foreign language patents, foreign language publications and other foreign language information listed on PTO form 1449, as presently understood by the individual(s) designated in 37 CFR 1.56(c) most knowledgeable about the content is given on the attached sheet, or where a foreign language patent is cited in a search report or other action by a foreign patent office in a counterpart foreign application, an English language version of the search report or action which indicates the degree of relevance found by the foreign office is listed on form PTO 1449 and is enclosed herewith.

03/29/2006 EFLORES 00000008 503718 10692772

01 FC:1806 180.00 DA

ATTORNEY DOCKET NO. 10031180-1

☒ **FEE AUTHORIZATION**

Please charge to Deposit Account 50-3718 the sum of \$180.00. At any time during the pendency of this application, please charge any fees required or credit any overpayment to Deposit Account 50-3718 pursuant to 37 CFR 1.25.

I hereby certify that this correspondence is being deposited with the United States Postal Service as:

☐ First Class Mail

☐ "Express Mail Post office to Addressee" service under 37 CFR 1.10.

Express Mail Label No.

Date of Deposit:

In an envelope addressed to: Commissioner for Patents,
P.O. Box 1450, Alexandria VA 22313-1450.

OR

☒ I hereby certify that this paper is being facsimile transmitted to the Patent and Trademark Office on the date shown below.

Date of Facsimile: March 27, 2006

Typed Name: Calvin B. Ward

Signature: 

Respectfully submitted,

Laura Wills Mirkarimi, et al

By 

Calvin B. Ward
Attorney/Agent for Applicant(s)

Reg. No. 30,896

Date: March 27, 2006

Telephone No. (925) 855-0413

RECEIVED
CENTRAL FAX CENTER

005/036

MAR 27 2006

| | | |
|--|--------------------------|-----------------------|
| FORM PTO-1449 (Modified) LIST OF PATENTS AND PUBLICATIONS FOR APPLICANT(S) INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary) | ATTNY. DOCKET NO. | SERIAL NO. |
| | 10031180-1 | 10/692.772 |
| | APPLICANT | |
| | Mirkarimi, et al | |
| | FILING DATE | GROUP ART UNIT |
| | 10/24/2003 | 1765 |

| REFERENCE DESIGNATION | | | U.S. PATENT DOCUMENTS | | | | |
|-----------------------|----|--------------------|-----------------------|--|-------|----------|----------------------------------|
| EXAM'R INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | Subclass | Filing Date if Appropriate |
| | A1 | 5,624,529 | 4/29/1997 | Dry Etching Method for Compound Semiconductors | | | |
| | A2 | 2003/066817 | 4/10/ 2003 | Tanabe, et al Dry Etching Method and Apparatus- | | | |
| | A3 | | | | | | |

OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)

| | |
|----|--|
| C1 | Kim DW, et al - "A Study of GaN Etching Characteristics Using HBr-Based Inductively Coupled Plasmas" Solid State Electronics, Elsevier Science Publishers, Barking, GB |
| C2 | Pearton SJ, et al - "Dry Etching Characteristics of III-V Semiconductors in Microwave BCL3 Discharges" Plasma Chemistry and Plasma Processing, Plenum Press, New York, US - vol. 13, no. 2, June 1, 1993 |
| C3 | Lee, et al - "Reactive Ion Etching of Vertical GaN Mesas by the Addition of ClH4 to BC13/H2/Ar Inductively Coupled Plasma" - Semiconductor Science and Technology, 10P, Bristol, GB. vol. 16, no. 6, June 2001 |
| C4 | Langer JP, et al - "Electron Cyclotron Resonance Plasma Etching of GaSb in Cl2/BC13/Cl4/Ar/H2 at Room Temperature" Journal of Vacuum Science & Technology B: Microelectronics Processing and Phenomena, American Vacuum Society, New York, NY, US - vol. 21, no. 4, July 2003. |
| C5 | |

EXAMINER:

DATE CONSIDERED:

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and *not* considered. Include copy of this form with next communication to Applicant(s).